Return on Investment (ROI) Program Funding Application

This template was built using the ITD ROI Submission Intranet application.
FINAL AUDIT REQUIRED: The Enterprise Quality Assurance Office of the Information Technology Department is required to perform post implementation outcome audits for all Pooled Technology funded projects and may perform audits on other projects.

This is a Pooled Technology Fund Request. Amount of funding requested: $172,240.00

Section I: Proposal

Date:	8/6/2003
Agency Name:	Veterans Affairs
Project Name:	Replacement of Resident Banking and Billing System
Agency Manager:	Robert Hellstern
Agency Manager Phone Number / E-Mail:	(641)753-4477 / robert.hellstern@ivh.state.ia.us
Executive Sponsor (Agency Director or Designee):	Greg Wright

D. Statutory or Other Requirements

Is this project or expenditure necessary for compliance with a Federal law, rule, or order?
☐ YES (If "Yes", cite the specific Federal law, rule or order, with a short explanation of how this project is impacted by it.)
Explanation:

Is this project or expenditure required by state law, rule or order?
☑ YES (If "YES", cite the specific state law, rule or order, with a short explanation of how this project is impacted by it.)
Explanation:
Iowa Code sections 35D.7, 35D.10, 35D.11 and 35D.12 address the banking and billing requirements that the Iowa Veterans Home must follow. The Iowa Veterans Home elected to maintain these records with a computerized system since we have over 700 residents. This computerized system calculates the bill for each resident monthly based on their current income and assets. The computerized system also records and maintains banking transactions for each resident.

Does this project or expenditure meet a health, safety or security requirement?
☑ YES (If "YES", explain.)

Explanation:
This project provides financial security for the residents of the Iowa Veterans Home in order for them to continue to perform their banking needs on site. Serving in the capacity as a fiduciary, this project will allow the Iowa Veterans Home to continue to securely manage the assets of residents and to ensure proper billing and admission/discharge records are safeguarded and maintained. This is necessary to fulfill Department of Veterans Affairs mandates and HIPAA regulations.

Is this project or expenditure necessary for compliance with an enterprise technology standard?
☑ YES (If "YES", cite the specific standard.)

Explanation:
This project will meet substantial parts of the compliance for the 100% E standard. This project also meets the standards as set forth in the States electronic record initiative.

[This section to be scored by application evaluator.]

Evaluation (20 Points Maximum)
If the answer to these criteria is "no," the point value is zero (0). Depending upon how directly a qualifying project or expenditure may relate to a particular requirement (federal mandate, state mandate, health-safety-security issue, or compliance with an enterprise technology standard), or satisfies more than one requirement (e.g. it is mandated by state and federal law and fulfills a health and safety mandate), 1-20 points awarded.

E. Impact on Iowa's Citizens

a. Project Participants

List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, other levels of government, etc.) and provide commentary concerning the nature of participant involvement. Be sure to specify who and how many **direct** users the system will impact. Also specify whether the system will be of use to other interested parties: who they may be, how many people are estimated, and how they will use the system.

Response:

The project participants will be the staff and residents at the Iowa Veterans Home. Key staff from several areas will be included in the process to ensure that all current process and requirements are met and that when a procedure/process is changed, it still adheres to local, state, federal and JCAHO standards. The residents will also have a representative with input when updating the design of the monthly bank statements and billing statements. Personnel from our regulatory agencies may also be included to ensure all pertinent data is being collected and easily extractable.

b. Service Improvements

Summarize the extent to which the project or expenditure improves service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.
Response:

The replacement of the current banking and billing system is being initiated by the notification of the current vendor that support for our current technology is being discontinued on December 31, 2003. Due to this occurrence, the Iowa Veterans Home has deemed it necessary to develop a new platform/application where the current duties are upgraded and efficiencies are realized by utilizing new technology. By doing such, the Iowa Veterans Home will maintain the quality of life for the residents by safeguarding their personal bank accounts and financial assets. There is also the expectation that by using current technology, the hardware and software costs that IVH currently maintains can be streamlined and reduced and the integrity and security of the data stored will be enhanced.

This project will maintain the Iowa Veterans Home ability to maintain banking and bill-paying services for its 700+ residents. If the residents had to bank off-site, transportation needs would become a great hassle factor. Since the Iowa Veterans Home has approximately 415 residents in wheelchairs, special accommodations for transportation would be required. Currently, for the residents that are bedridden, accommodations are made at the Iowa Veterans Home banking center to allow the residents to still make transactions. This would not be easily done at an off-site bank.

c. Citizen Impact

Summarize how the project leads to a more informed citizenry, facilitates accountability, and encourages participatory democracy. If this is an extension of another project, what has been the adopted rate of Iowa's citizens or government employees with the preceding project?
Response:

The main project stakeholders are the residents of the Iowa Veterans Home (over 700) and their family members in order secure and preserve their assets.

The staff at the Iowa Veterans Home are the other main stakeholders. Without a computerized system for banking and billing, functions performed would take longer and may be more susceptible to errors. Additional staff would have to be added if the computerized program is not replaced.

Other stakeholders include the United States Department of Veterans Affairs, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the Iowa Department of Inspection and Appeals, the Iowa Auditor of State, and the Iowa Department of Human Services who are the regulatory oversight agencies for the Iowa Veterans Home which audit patient funds and billings. This project will allow these agencies to extract transactions easily for their oversight.

d. Public Health and/or Safety

Explain requirements or impact on the health and safety of the public.
Response:
Evaluation (10 Points Maximum)

- Minimally improves Customer Service (0-3 points).
- Moderately improves Customer Service (4-6 points).
- Significantly improves Customer Service (7-10 points).

Evaluation (15 Points Maximum)

- Minimally directly impacts Iowa citizens (0-5 points).
- Moderately directly impacts Iowa citizens (6-10 points).
- Significantly directly impacts Iowa citizens (11-15 points).

F. Process Reengineering

Provide a pre-project or pre-expenditure (before implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how citizens interact with the current system.
Response:
The Bull Server that the applications are based is an AIX 4.3.3 (UNIX) which allows us to use the older HVX (GCOS operating system) to run the various internal applications. According to a letter received by Harry Carver from Department of Human Services dated May 27, 2003, Bull will support the HVX operating system until June 30, 2006. However, the current AIX environment will only be supported until 12/31/2003. This equipment has also served its current useful life as it was purchased in the early 1980s. This makes the equipment around 20 years old. The Bull server is a high-end server and a more expensive commodity than the servers purchased from the vendors on state contract. The annual maintenance cost to the facility for the Bull System is around $20,000 and is expected to rise substantially in ongoing years if maintenance can even be procured.

The Iowa Veterans Home relies heavily on this system to perform many administrative functions such as: admissions/discharges of residents, resident banking and checkwriting, and the agency monthly billing system to residents for their cost of care.

Currently, this system is utilized to also provide federally mandated data in regards to various data elements that are tied to funding streams. In addition, the current system is relied upon to extract data that is requested by oversight agencies, such as the Iowa Department of Inspection and Appeals, the Iowa Department of Human Services, the United States Department of Veterans Affairs, etc.

Provide a post-project or post-expenditure (after implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how citizens will interact with the proposed system. In particular, note if the project or expenditure makes use of information technology in reengineering traditional government processes.

Response:

In addition to items identified in the pre-project above, the post-project system will utilize current technology to create a browser-based system that will generate as little paper as possible. All data is to be accessible online and processes modified to allow for the rapid search and retrieval of pertinent information. Data security will be paramount in ensuring that the residents assets are being maintained.

[This section to be scored by application evaluator.]

Evaluation (10 Points Maximum)

- Minimal use of information technology to reengineer government processes (0-3 points).
- Moderate use of information technology to reengineer government processes (4-6 points).
- Significant use of information technology to reengineer government processes (7-10).

[This section to be scored by application evaluator.]

Evaluation (5 Points Maximum)

- The timeline contains several problem areas (0-2 points)
- The timeline seems reasonable with few problem areas (3-4 points)
- The timeline seems reasonable with no problem areas (5)

H. Funding Requirements

On a fiscal year basis, enter the estimated cost by funding source: Be sure to include developmental costs and ongoing costs, such as those for hosting the site, maintenance, upgrades, ...

	FY05		FY06		FY07	
	Cost($)	% Total Cost	Cost ($)	% Total Cost	Cost ($)	% Total Cost
State General Fund	$32,947	12%	$0	0%	$0	0%
Pooled Tech. Fund /IowAccess Fund	$172,240	62%	$0	0%	$0	0%
Federal Funds	$0	0%	$0	0%	$0	0%
Local Gov. Funds	$0	0%	$0	0%	$0	0%
Grant or Private Funds	$0	0%	$0	0%	$0	0%
Other Funds (Specify)	$73,333	26%	$7,500	100%	$7,500	100%
Total Project Cost	$278,520	100%	$7,500	100%	$7,500	100%

Non-Pooled Tech. Total	$106,280	38%	$7,500	100%	$7,500	100%

<u>**Evaluation**</u> **(10 Points Maximum)**

- The funding request contains questionable items (0-3 points)
- The funding request seems reasonable with few questionable items (4-6 points)
- The funding request seems reasonable with no problem areas (7-10)

I. Scope

Is this project the first part of a future, larger project?

☐ YES (If "YES", explain.) ☑ NO, it is a stand-alone project.

Explanation:

Is this project a continuation of a previously begun project?

☑ YES (If "YES", explain.)

Explanation:

The Iowa Veterans Home is currently running a computerized system for banking and billing, but its useful life is coming quickly to an end and therefore must be replaced.

J. Source of Funds

On a fiscal year basis, how much of the total project cost ($ amount and %) would be <u>absorbed</u> by your agency from non-Pooled Technology and/or IOWAccess funds? If desired, provide additional comment / response below.

Response:

First year - $106,280 or 38% in reallocation of existing IT staff.

Second year - $7,500 or 100% for maintenance agreements on new hardware/software.

<u>**Evaluation (5 Points Maximum)**</u>

- 0% (0 points)
- 1%-12% (1 point)
- 13%-25% (2 points)
- 25%-38% (3 points)
- 39%-50% (4 points)
- Over 50% (5 points)

Section II: Financial Analysis

A. Project Budget Table

It is necessary to <u>estimate and assign</u> a useful life figure to <u>each</u> cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all <u>new</u> annual ongoing costs that are project related.

The Total Annual Prorated Cost (State Share) will be calculated based on the following equation:

$$\left[\left(\frac{Budget\ Amount}{Useful\ Life}\right) \times \%\ State\ Share\right] + \left(Annual\ Ongoing\ Cost \times \%\ State\ Share\right) = Annual\ Prorated\ Cost$$

Budget Line Items	Budget Amount (1st Year Cost)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	$106,280	1	31.00%	$0	0.00%	$32,947
Software	$130,240	4	100.00%	$0	0.00%	$32,560
Hardware	$30,000	3	100.00%	$0	0.00%	$10,000
Training	$10,000	4	100.00%	$0	0.00%	$2,500
Facilities	$0	1	0.00%	$0	0.00%	$0
Professional Services	$0	4	0.00%	$0	0.00%	$0
ITD Services	$0	4	0.00%	$0	0.00%	$0
Supplies, Maint, etc.	$2,000	1	100.00%	$7,500	100.00%	$9,500
Other	$0	1	0.00%	$0	0.00%	$0
Totals	$278,520	---	---	$7,500	---	$87,507

C. Tangible and/or Intangible Benefits

Respond to the following and transfer data to the ROI Financial Worksheet as necessary:

1. Annual Pre-Project Cost - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation. **Quantify actual state government direct and indirect costs** (personnel, support, equipment, etc.) associated with the activity, system or process <u>prior to </u>project implementation.
Describe Annual Pre-Project Cost:

Quantify Annual Pre-Project Cost:

	State Total
FTE Cost (salary plus benefits):	$0.00
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$0.00
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$0.00
Total Annual Pre-Project Cost:	$0.00

2. Annual Post-Project Cost - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation. **Quantify actual state government direct and indirect costs** (personnel, support, equipment, etc.) associated with the activity, system or process <u>after </u>project implementation.
Describe Annual Post-Project Cost:

Quantify Annual Post-Project Cost:

	State Total
FTE Cost (salary plus benefits):	$0.00
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$0.00
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$0.00
Total Annual Post-Project Cost:	$0.00

3. Citizen Benefit - Quantify the estimated annual value of the project to Iowa citizens. This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork

such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb," use a value of $10 per hour for citizen time.

Describe savings justification:

Transaction Savings

Number of annual online transactions:	8
Hours saved/transaction:	1
Number of Citizens affected:	700
Value of Citizen Hour	10
Total Transaction Savings:	$56,000
Other Savings (Describe)	$0
Total Savings:	**$56,000**

4. Opportunity Value/Risk or Loss avoidance - Quantify the estimated annual <u>non-operations</u> benefit to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or Federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

Response:
If the project is funded, it is estimated that $101,894 will be collected in FY05 through Medicaid billings.

This project will maintain stability to our billing system and reporting so we can operate with those funds.

This project will also provide security and integrity of the residents financial records.

5. Benefits Not Readily Quantifiable - List and summarize the overall non-quantifiable benefits (i.e., IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.).
Response:
The success of this project will allow for the accurate tracking of resident assets in a secure environment, which the Iowa Veterans Home has a fiduciary responsiblity to perform.

The completion of the project will also allow for enhanced billing statements and reports. Staff will be able to customize reports as data will be available 24 hours a day, instead of requesting I.T. staff to extract information.

ROI Financial Worksheet	
A. Total Annual Pre-Project cost (State Share from Section II C1):	$0
B. Total Annual Post-Project cost (State Share from Section II C2):	$0
State Government Benefit (= A-B):	$0
Annual Benefit Summary:	$0
State Government Benefit:	$0
Citizen Benefit:	$56,000
Opportunity Value or Risk/Loss Avoidance Benefit:	$101,893
C. Total Annual Project Benefit:	$157,893
D. Annual Prorated Cost (From Budget Table):	$87,507
Benefit / Cost Ratio: (C/D) =	1.80
Return On Investment (ROI): ((C-D) / Requested Project Funds) * 100 =	40.87%

[This section to be scored by application evaluator.]

<u>Evaluation</u> **(25 Points Maximum)**

- The financial analysis contains several questionable entries and provides minimal financial benefit to citizens (0-8 points).
- The financial analysis seems reasonable with few questionable entries and provides a moderate financial benefit to citizens (9-16 points).
- The financial analysis seems reasonable with no problem areas and provides maximum financial benefit to citizens (17-25).

Note: For projects where no State Government Benefit, Citizen Benefit, or Opportunity Value or Risk/Loss Avoidance Benefit is created due to the nature of the project, the Benefit/Cost Ratio and Return on Investment values are set to Zero.

Appendix A. Auditable Outcome Measures

For each of the following categories, <u>list the auditable metrics for success </u>after implementation and <u>identify how they will be measured.</u>

1. Improved customer service
Processes will be put into place to measure the ease of use of the system. Measures will also be put into place to monitor and track the effectiveness of retrieving data online and producing ad-hoc queries and reports.

2. Citizen impact
Measures will be put in place to ensure that resident assets are not hindered and that the accuracy of all

data is correct and valid and easily reportable. If possible there will be a period of time where both the old and new systems will be run in parallel to ensure data integrity is maintained.

3. Cost Savings

Measures will be put into place to determine the efficiencies that are gained by utilizing newer technology and providing information and data electronically. Various tools may be used to gauge these measures such as SQL, web server statisitics, reporting tools, etc.

4. Project reengineering

Project engineering will be evaluated by the documentation and monitoring of the technologies that will be put into place during the life of this project. Various methods will be used to determine the effectiveness of this reengineering process including SQL reporting, web interface reporting, etc.

5. Source of funds (Budget %)

No response required

6. Tangible/Intangible benefits

Intangible benefits will be measured through customer inquiries on the ability to use the system and create reasonable queries to reduce the workload of all associated staff.